



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**D119-646-313**  
**Job Sheet 176978**



Part No: D119-646-313

Job Qty: 4 ea

Part Name: Skidtube Protector, LH



MAY 14 2018

Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 5/3/18

Job Tracking No:

Due Date: 5/29/18

Created By: Michelle Gagnon-Donovan

Type: SOLD

Description:

Note: DWG REV B IPP REV:A 15.12.10 NEW ISSUE DD VERF:JLM IPP REV:B 17.05.10 AS PER DSI9734 REV B  
DD VERF:JFS IPP REV:C 17.08.16 AS PER DSI9734 REV C DD VERF:DP

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off    |
|-------|--------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|-------------|
|       |                    |       |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |             |
| 90    | Start up Operation | 4 Ea  | 5/29/18    | 5/29/18  | 0.00      | 0.00    | Start Up Stores/Pkg-1 |           | 5/14/2018   |
| 110   | Packaging          | 4 pcs | 5/29/18    | 5/29/18  | 0.00      | 0.00    | Packaging1-1          |           | MAY 31 2018 |
| 120   | QC                 | 4 pcs | 5/29/18    | 5/29/18  | 0.00      | 0.00    | QC4                   |           | MAY 31 2018 |
| 125   | DC                 | 4 pcs | 5/29/18    | 5/29/18  | 0.00      | 0.00    | DC                    |           |             |
| 130   | Packaging          | 4 pcs | 5/29/18    | 5/29/18  | 0.00      | 0.00    | Packaging3-1          |           | MAY 31 2018 |
| 140   | QC21-FG            | 4 Ea  | 5/29/18    | 5/29/18  | 0.00      | 0.00    | QC21                  |           | MAY 31 2018 |

Part Op 125 - Photocopy bluefile & type labels per PPP D119-646-313 CHG002  
Descriptions: 130 - Identify and pack for shipping as per PPP D119-646-313 Location:

### Job BOM

| Part / Item   | Component Name | Quantity      | Operation             | Container            |
|---------------|----------------|---------------|-----------------------|----------------------|
| AN3-45A       | Bolt           | 16 Ea (4 ea)  | 90-Start up Operation | 5006250x7 5001638 X9 |
| AN3-47A       | Bolt           | 24 Ea (6 ea)  | 90-Start up Operation | FM138046-20 X4       |
| AN3-50A       | Bolt           | 24 Ea (6 ea)  | 90-Start up Operation | 5027514x10 5014160x2 |
| D3904-1       | Washer         | 24 Ea (6 ea)  | 90-Start up Operation | 5055204              |
| D4506-3       | Washer         | 24 Ea (6 ea)  | 90-Start up Operation | F142350x13           |
| D5369-1       | Cable Guard    | 4 Ea (1 ea)   | 90-Start up Operation | 5074947              |
| D5371-1       | Hook           | 4 Ea (1 ea)   | 90-Start up Operation | 5075492              |
| D5372-1       | Plug           | 4 Ea (1 ea)   | 90-Start up Operation | 5052547              |
| D5374-1       | Bushing        | 24 Ea (6 ea)  | 90-Start up Operation | 5021802x2 5049847x12 |
| D5374-3       | Bushing        | 32 Ea (8 ea)  | 90-Start up Operation | 5025015x8 5049888x16 |
| D5376-1       | Drilling Tool  | 4 Ea (1 ea)   | 90-Start up Operation | 5045112x1 5018448x3  |
| MS21042L3     | Nut            | 40 Ea (10 ea) | 90-Start up Operation | 5054107              |
| NAS1149D0316J | Washer         | 16 Ea (4 ea)  | 90-Start up Operation | FM134502-2           |
| NAS1149D0332J | Washer         | 72 Ea (18 ea) | 90-Start up Operation | 5035396              |



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL.: 1 813 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

Container No: S076890



Part: D119-646-313

Job No: 176978

Serial No/Batch: S076890

Revision: C

Inspector:

Exp Date: 05/31/2018

Instructions:

Date: 05/31/18

**Job Allocations**

| Operation             | Component Part | Required | Inventory | Allocated |
|-----------------------|----------------|----------|-----------|-----------|
| 90-Start up Operation | AN3-45A        | 16       | 19        | 0         |
|                       | AN3-47A        | 24       | 4         | 0         |
|                       | AN3-50A        | 24       | 12        | 0         |
|                       | D3904-1        | 24       | 131       | 0         |
|                       | D4506-3        | 24       | 33        | 0         |
|                       | D5369-1        | 4        | 0         | 0         |
|                       | D5371-1        | 4        | 0         | 0         |
|                       | D5372-1        | 4        | 10        | 0         |
|                       | D5374-1        | 24       | 14        | 0         |
|                       | D5374-3        | 32       | 24        | 0         |
|                       | D5376-1        | 4        | 9         | 0         |
|                       | MS21042L3      | 40       | 1,968     | 0         |
|                       | NAS1149D0316J  | 16       | 762       | 0         |
|                       | NAS1149D0332J  | 72       | 2,689     | 0         |

**Part Specifications**

Specifications could not be found.

Plex 5/3/18 2:42 PM Dart.Gagnon.Michelle



## 10.0 PARTS LIST:

| Qty.<br>-313 | Qty.<br>-314 | PART NUMBER   | DESCRIPTION            |
|--------------|--------------|---------------|------------------------|
| X            |              | D119-646-313  | SKIDTUBE PROTECTOR, LH |
|              | X            | D119-646-314  | SKIDTUBE PROTECTOR, RH |
| 6            | 6            | D3904-1       | WASHER                 |
| 6            | 6            | D4506-3       | WASHER                 |
| 1            |              | D5369-1       | CABLE GUARD, LH        |
|              | 1            | D5369-2       | CABLE GUARD, RH        |
| 1            |              | D5371-1       | HOOK, LH               |
|              | 1            | D5371-2       | HOOK, RH               |
| 1            | 1            | D5372-1       | PLUG                   |
| 6            | 6            | D5374-1       | BUSHING                |
| 8            | 8            | D5374-3       | BUSHING                |
| 1            | 1            | D5376-1       | DRILLING JIG           |
| 4            | 4            | AN3-45A       | BOLT                   |
| 6            | 6            | AN3-47A       | BOLT                   |
| 6            | 6            | AN3-50A       | BOLT                   |
| 18           | 18           | NAS1149D0332J | WASHER                 |
| 4            | 4            | NAS1149D0316J | WASHER                 |
| 10           | 10           | MS21042L3     | NUT                    |

## 11.0 WEIGHT AND BALANCE

The following weight and balance changes are applicable:

| Installation                                                   | Weight            | LONGITUDINAL       |                       | LATERAL             |                         |
|----------------------------------------------------------------|-------------------|--------------------|-----------------------|---------------------|-------------------------|
|                                                                |                   | Arm                | Moment                | Arm                 | Moment                  |
| D119-646-313<br>SKIDTUBE PROTECTOR, LH<br>ON STANDARD SKIDTUBE | 4.3 lb<br>1.95 kg | 108.1 in<br>4.3 m  | 465 in-lb<br>8.4 kg-m | -43.4 in<br>1.7 m   | -187 in-lb<br>-3.3 kg-m |
| D119-646-314<br>SKIDTUBE PROTECTOR, RH<br>ON STANDARD SKIDTUBE | 4.3 lb<br>1.95 kg | 108.1 in<br>4.30 m | 465 in-lb<br>8.4 kg-m | 43.4 in<br>1.7 m    | 187 in-lb<br>3.3 kg-m   |
| D119-646-313<br>SKIDTUBE PROTECTOR, LH<br>ON FLOAT SKIDTUBE    | 1.6 lb<br>0.72 kg | 133.3 in<br>3.38 m | 213 in-lb<br>2.4 kg-m | -43.4 in<br>-1.7 in | 69 in-lb<br>1.2 kg-in   |
| D119-646-314<br>SKIDTUBE PROTECTOR, RH<br>ON FLOAT SKIDTUBE    | 1.6 lb<br>0.72 kg | 133.3 in<br>3.38 m | 213 in-lb<br>2.4 kg-m | 43.4 in<br>1.7 in   | 69 in-lb<br>1.2 kg-in   |

APPROVED

|            |          |                                                                                                                                                                                                                                                                                                     |               |
|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE USA, INC.</b><br>EUGENE, OR                                                                                                                                                                                                                                                       |               |
| DRAWN      | VS       |                                                                                                                                                                                                                                                                                                     |               |
| CHECKED    | MB       | DRAWING NO.                                                                                                                                                                                                                                                                                         | REV. C        |
| MFG. APPR. | N/A      | DSI 9734                                                                                                                                                                                                                                                                                            | SHEET 8 OF 15 |
| APPROVED   | HS       | TITLE                                                                                                                                                                                                                                                                                               | SCALE         |
| DE APPR.   | DS       | SKIDTUBE PROTECTOR KIT                                                                                                                                                                                                                                                                              | NTS           |
| DATE       | 17.06.27 | <small>COPYRIGHT © 2015 BY DART AEROSPACE USA, INC.<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> |               |